

CLAIMS

1. A method of operating launch vehicles, comprising the steps of: one-time using at least a part of at least one expendable rocket booster within at least one launch vehicle; and reusing at least a part of at least one nonexpendable rocket booster within at least one launch vehicle;

characterized by

replacing at least one serviceable part of at least one nonexpendable rocket booster for a new one before at least one repeated use of the at least one nonexpendable rocket booster; and mounting the replaced part onto at least one expendable rocket booster.

2. The method of operating the launch vehicles as claimed in claim 1, characterized by mounting the replaced part onto the at least one expendable rocket booster before each use of said booster within the at least one launch vehicle during at least two launches of the latter.

3. The method of operating the launch vehicles as claimed in claims 1, 2, characterized by replacing a part having the least remaining lifetime.

4. The method of operating the launch vehicles as claimed in claims 1–3, characterized by replacing a part having the least remaining service life.

5. The method of operating the launch vehicles as claimed in claims 1–4, characterized by storing the at least one replaced part before the step of mounting the same.

6. The method of operating the launch vehicles as claimed in claims 1–5, characterized by using at least one part of at least one nonexpendable rocket booster within at least two different launch vehicles.

7. A set of rocket boosters for operating launch vehicles, having at least one expendable rocket booster and at least one nonexpendable rocket booster,

characterized in that

at least one part of equipment of the expendable booster and at least one part of equipment of the nonexpendable booster are replaceably mounted on said boosters and are capable to be interchangeable.

8. A set of rocket boosters for operating launch vehicles as claimed in claim 7, characterized in that at least a part of interchangeable equipment is made interconnected to another part of said equipment by at least a part of communications and structurally united into at least one interchangeable module by at least a part of a housing of at least one compartment of a booster.

9. A set of rocket boosters for operating the launch vehicles as claimed in claims 7, 8, characterized in that at least a part of the interchangeable equipment of said rocket boosters is capable of being mounted onto at least one launch vehicle.

10. A set of rocket boosters for operating the launch vehicles as claimed in claims 7, 8,

characterized in that at least a part of the interchangeable equipment of said rocket boosters is capable of being mounted onto at least two different launch vehicles.